# QUARTERLY SITE INSPECTION REPORT FEBRUARY 1998 BAILEY SUPERFUND SITE ORANGE COUNTY, TEXAS

March 1998

727931-14000

Prepared by:



125142

# Quarterly Site Inspection Report February 1998 Bailey Superfund Site

# Prepared by:



#### PARSONS ENGINEERING SCIENCE, INC.

#### **MARCH 1998**



Ernest Schroeder, P.E.

33556

P.E. Number

3/20/98

Date

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#### **SECTION 1**

#### 1.0 INTRODUCTION

The second quarterly inspection of the Bailey Site was conducted on February 27, 1998 by Ernie Schroeder and Mark Murphy of Parsons ES. Mr. Schroeder was the Project Manager and Mr. Murphy was the Construction Manager during the Final Remediation activities and both have a thorough knowledge of the site background and understanding of the implemented remedy. The inspection was conducted in accordance with the Final Inspection, Maintenance, and Monitoring Plan (prepared by Parsons ES and GeoSyntec, September 1997). The following BSSC technical committee members were present for the inspection: Chuck Orwig, Lou Levi, and Fred Manhart. Also, Joe Wheland and Todd Broussard of BFI attended the inspection.

An inspection check list was developed to aide in the inspection of the site and is included in Appendix A. The check list was completed as the entire site was walked and observations were made. Any areas of concern that were observed during the inspection were noted and located on a site map which is included in Appendix B. Photographs were taken during the inspection and are presented in Appendix C. A summary of the inspection is presented in Section 2.

#### **SECTION 2**

#### 2.0 INSPECTION SUMMARY

Ernie Schroeder, P.E. and Mark Murphy of Parsons ES, the Bailey Site Settlors Committee's (BSSC) authorized representative, conducted a visual inspection of the site February 27, 1998.

#### 2.1 Grounds Inspection

The North and East Dike areas were inspected by traversing the surface area of each dike and thoroughly looking for signs of problems that would affect the integrity of the geosynthetic lightweight cap system. The grass was generally found to be in good condition. The grass has been dormant since it was cut last fall and remains at a height of approximately 3 to 4 inches. There are signs of green patches that indicate the grass is starting to come out of its dormant state. There are a few areas (south end of the East Dike and west end of the North Dike) where the grass has not fully developed; these locations are noted on the map provided in Appendix B.

The site conditions have been abnormally wet since the beginning of the year. The National Weather Service for Beaumont/Port Arthur has recorded 16.66 inches of precipitation to date for the year. The normal year to date precipitation is 8.92 inches. The last rainfall event prior to the inspection occurred February 25<sup>th</sup> with approximately 2 inches of rainfall.

The areas of the geosynthetic lightweight cap were inspected for signs of erosion. No signs of significant erosion were observed. The location on the North Dike (west end) previously identified during the last inspection had been repaired and appears to be in good condition. The hay bales are providing erosion protection while the grass is developing. Other areas where erosion channeling had been repaired are holding up well and winter grass is developing. No exposed geosynthetics were observed.

The North and East Dike areas were carefully observed for signs of differential settlement. Some ponding generally less than 2 inches in depth was noted along the edge of the access road of the East and North Dikes. One area located on the East Dike was noted to be approximately 2 to 3 inches in depth. The ponding is believed to be attributed to the saturated soil conditions from the abnormal to date precipitation and the recent heavy rainfall that occurred prior to the inspection. The ponding was very similar to the ponding that was observed during the last quarterly inspection. No evidence, such as distressed vegetation, indicated that this area was not draining properly. The ponding locations are noted on the map provided in Appendix B. One visual observation of possible differential settlement was noted on the North Dike area. This location was on the rip-rap at the western end of the North Dike on the Pond A bank, which is outside of the lightweight geosynthetic composite cap limits. A section of approximately 20 LF in

length appears to have a dip of approximately 1 foot or less in the middle of the slope from adjacent areas. This location was noted on the map provided in Appendix B. This is the same location that was observed during the last Quarterly Inspection conducted on November 21, 1997. Little change appears to have taken place since the last inspection. No cracking was observed in the immediate area or any other signs of distress to the nearby cap areas.

The gas vents located on the North and East Dikes were inspected and all found to be in good condition.

#### 2.2 Dike Breaches and Drainage Pipes Inspection

The two breaches in the North Marsh perimeter dike were inspected and found to be in good condition and allowing free flow of tidal waters. Vegetation has started growing on the slope of the breach located in the North Marsh. The drainage pipes in the former laydown area and at the end of the East Dike were found to be in good condition with no obstructions.

#### 2.3 Fence and Sign Inspection

The length of the fence was walked and observed to be in good condition. The gates and locks were inspected and found to be in good working order. The signs around the perimeter of the site were properly posted and visible. One sign was found to be missing along the fence of the East Dike drainage channel. The location of the missing sign is noted on the map provided in Appendix B.

#### 2.4 Site Access Bridge Inspection

The access bridge to the site was observed to be in good condition. The bridge decking, hand rails, approaches, and steel structure were visually inspected.

#### 2.5 Road Inspection

The access roads on the North and East dikes were inspected for signs of rutting, potholes, erosion, and accumulation of silt. The roads were found to be in good condition.

#### 2.6 Other Observations

Maintenance work performed after the last Quarterly Inspection (November 21, 1997) appeared to be working well. This work included repairing an erosion area at the west end of the North Dike. The hay bales are providing run-off erosion protection while the grass is being established. Other minor erosion areas that have been repaired are holding up well and vegetation is starting to develop.

The thin grass observed around the site should improve in the spring when the weather is more conducive to growth. The grass will not be dormant in warmer weather.

Some silt fence construction debris left from the Final Remediation was observed at the North End of the East Dike.

Near the site entrance at the former laydown area, there are two drainage ditches that drain into the drainage channel and the site fence runs across these ditches. An observation was made that there was no barrier from the bottom of the fence to the bottom of the ditch. It could be possible for someone to possibly gain entrance into the site at these locations by crawling under the fence at these ditch locations. These locations are noted on the map located in Appendix B.

#### **SECTION 3**

#### 3.0 SUMMARY OF PROBLEM AREAS AND RECOMMENDED ACTION

Areas of concern observed during the February 1998 Quarterly Site Inspection include thin grass cover in some areas, ponding of water along the access road, a missing sign posted to the fence along the East Dike, openings under the fences at the drainage ditches, silt fence debris at the north end of the East Dike and possible differential settlement outside of the geosynthetic cap limits on the North Dike slope along Pond A. The concerns identified during this site inspection do not pose an immediate threat to the remedial action and do not inhibit the proper function of the geosynthetic lightweight cap.

Table 3.1 on the following page explains the areas of concern that were observed during the site inspection as well as recommendations to address those areas of concern.

Table 3.1
Observations and Recommendations

	OBSERVATION	RECOMMENDATION
1.	Thin grass cover was observed in a few small areas of the site. This could be due to the late planting of the grass and that it did not fully develop before going dormant for the winter.	A recommendation is made to fertilize and re-seed these areas this Spring. A sample of the soil in these areas will be collected and sent to the Texas A&M Agricultural Extension Office and analyzed for the proper type and application rate of fertilizer required for growing grass.
2.	Some ponding water was observed along the access roads of the North and East Dikes. The ponding is attributed to saturated soils with recent heavy rainfall and a relative flat slope along the edge of the road.	A recommendation is made to mark these areas and fill in with protective soil and grade to provide positive drainage across the cap limits. These areas will then have to be fertilized and seeded.
3.	A sign was missing on the fence that runs along the East Dike drainage channel.	A recommendation is made to replace the sign.
4.	In the former laydown area there are two drainage ditches that run underneath the fence.	A recommendation is made to install some posts and barb wire to provide a barrier in this existing open space that could deter possible trespassing to the site.
5.	Some silt fence debris from the Final Remediation was observed at the north end of the East Dike.	A recommendation is to pick-up and properly dispose of this construction debris.
6.	Possible differential settlement was observed in a small area of the rip-rap slope located outside of the geosynthetic lightweight cap limits on the North Dike. No signs of differential settlement were observed on the adjacent cap areas. This location was noted on the map included in Appendix B.	The recommended action is to continue visual monitoring of this area.

# **APPENDIX A**

# QUARTERLY SITE INSPECTION CHECK LIST

125145

Inspection Date: FERRUARY  Inspection Time: 09:00 Ar  Name of Inspector: ERNIE SCA  Weather Conditions: CLEAR TE	Y IEOEOE	x/m	LARK WERPHY
Ground Inspections			
Condition of Vegetation:			
<b>3</b>	Grass He	eight	3 to 4"
	Color	Ü	BROWN TO GREEN
	Fuliness		ISOLATED THIN AREAS
	Areas of	Concern:	Yes No (If Yes Detail on Map)
Signs of Erosion:	Yes	No	(If yes detail location on map and note average depth and width)
Exposed Geosynthetics:	Yes	No	(If yes provide location on map and note if its the geocomposite drainage layer, 60 mil HDPE liner, or geosynthetic clay liner)
Signs of Differential Settlement:	Yes	No	(If yes, provide location on map noting estimated depth and width)
Ponding Greater than 2" in Depth:	(Yes)	No	(If yes, provide location on map noting depth)
Evidence of Prolonged Ponding	Yes	No	
Estimated date of last rain event:	HEAVY	RAW	THE 25th FEB.
	APPRO		RAIN. JAN & FEB. VERY WET MONTHS
Gas Vents:	• • -	BEEN	VERY WET MONTHS
Condition of Barrier:	GOOP		
Condition of Piping:	GOOD	<b>A</b> 1-	
Screens Intact:	(es)	No No	(If no to any, provide details on map)
Riser Pipe Plumb:	Yes	No 	

Condition of Dike Breaches and Drainage Pip	condition	on of Dik	e Breaches	and Drainage	Pipes
---	-----------	-----------	------------	--------------	-------

Verify that each allows free drainage:

Pond A culvert at South end of East Dike: Yes

No

Site Entrance Area (Non-capped Area):

No

Perimeter Dike Breach in Pond A:

Perimeter Dike Breach in North Dike:

No No

If the answer was No to any of the above, describe the obstruction:

N/A

#### **Fence and Sign Inspection**

**Chain Link Fencing** 

Signs of unauthorized entry:

Yes

**@** 

Fence Damage:

Yes Yes



Barb Wire Damage:

Yes



Gates & Locks in good condition:



(Yes)

No

**Overhang Extensions** 

Corrosion:

Signs of unauthorized entry:

Yes



Signs of damage:

Yes



Signs

Verified all signs:

Yes

Signs on all gates:

(Yes)

Provide location of any damage on the map. Describe below any damage to the fence or signs:

ONE SIGN WAS OBSERVED TO BE MISSING ON THE

FENCE ALONG THE EAST ONE AREA.

Site Access Bridge			
Are the following in good condition:			
Wood Decking	(Es)	No	
Hand Rails	(YES)	No	
Approaches	(Yes)	No	
Bridge Steel Structure	(es)	No	
If no, describe the observed condition:	•		
	/		
N/A			
Road Inspection		-	
Rutting	Yes	No	(If yes to any, provide location on map)
Potholes	Yes	<b>1</b>	
Erosion Channeling	Yes	<b>40</b>	
Accumulation of Silt	Yes	No	
Other General Site Observa	tions:		
. THE AREA ON THE	= Nb	KTH DI	ke where
THE SOIL HAD ERON	DED I	DOWN 7	O THE LINEK
HAD BEEN REPAIRE	D An	SO AP	EARED TO BE
IN GOOD CONDITION	WITT	Y THE	HAY BALES
PROVIDING EROSION	Pro	ECTION	I UNTIL THE
GRASS CAN FULLY			
· IT APPEARS THE	GRA	55 15	STILL DORMANT
BUT IS SHOWING	SIGNS	OF	GROWTH BERINWING.
. WINTER GRASS TH			
EROSION PATCHES	HAS -	TAKEN	GROWTH.
The second secon	<u> </u>		

Summary of Problem Areas Identified
. THIN GRASS WAS OBSERVED AT THE SOUTH END
OF THE EAST DIKE AND WEST END OF THE
NORTH DIKE.
· POSSIBLE RIP-RAP SETTLEMENT ON THE
NORTH DIKE POND A SLOPE (OUT SIDE OF
THE CAP LIMITS).
· MISSING SIGN MOUNTED TO THE FENCE
LOCATED ON THE EAST DIKE ALONG THE
ORAINAGE CHANNEL.
· ONE AREA OF PONDING OF 2 TO 3" ON
THE EAST DIKE. THERE ARE SOME OTHER
AREAS OF PONDING OF 2" OR LEGS ALONG
THE ACCESS ROADS OF BOTH THE EAST
AND NORTH DIKES.
· SOME SILT FENCE DEBRIS THAT NEEDS TO
BE CLEANED-UP AT THE NORTH END OF THE
EAST DIKE.
· FENCE EXTENSION / BARBWIRE NEEDS TO BE PRINCES
· FENCE EXTENSION BARBWIRE NEEDS TO BE PRINCED WHERE FENCE CROSSES DRAINAGE DITCHES IN
THE FORMER SOFE LAYONWAL AREA.

Inspector's Signature

2/27/98

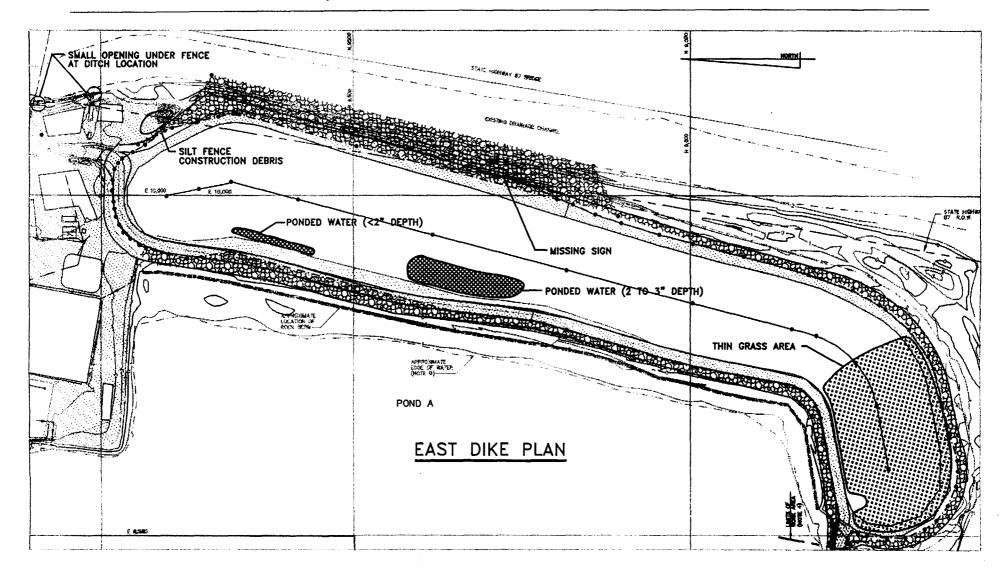
Date

# **APPENDIX B**

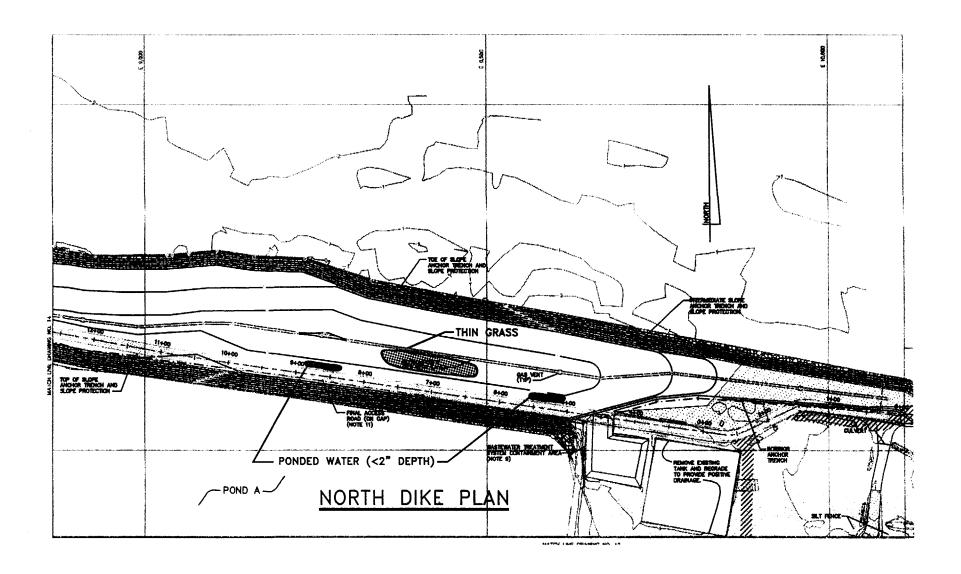
**SITE MAPS** 

125148

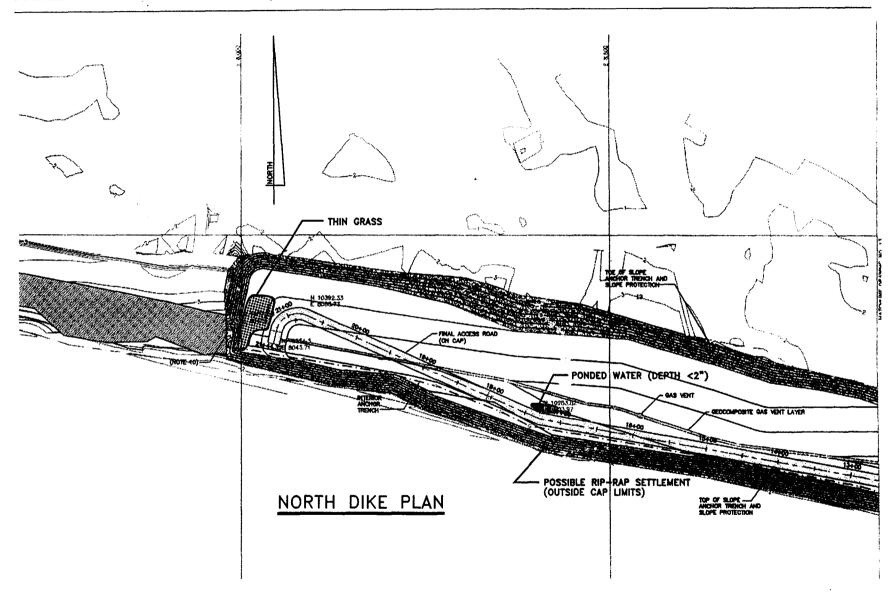
#### PARSONS ENGINEERING SCIENCE, INC.













# **APPENDIX C**

# **PHOTOGRAPHS**

Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

Date:

02/27/98

Direction:

West

Comments:

Site Entrance and Access Bridge.



#### Photographer:

Parsons Engineering Science, Inc.

Date:

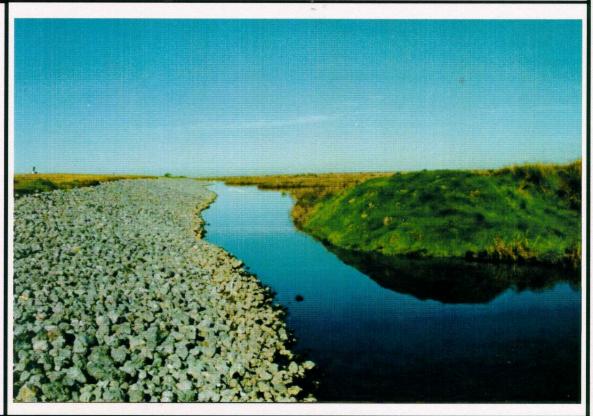
02/27/98

Direction:

West

Comments:

Perimeter Dike at the North Marsh Breach and North Dike Slope.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

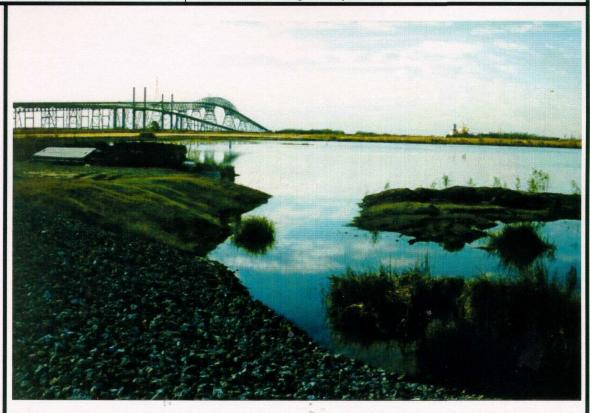
02/27/98

#### Direction:

South

#### Comments:

Perimeter Dike at the Pond A Breach.



#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

East

#### Comments:

North Dike Cap and Access Road.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

West

#### Comments:

North Dike Cap and Slopes Along North Marsh.



#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

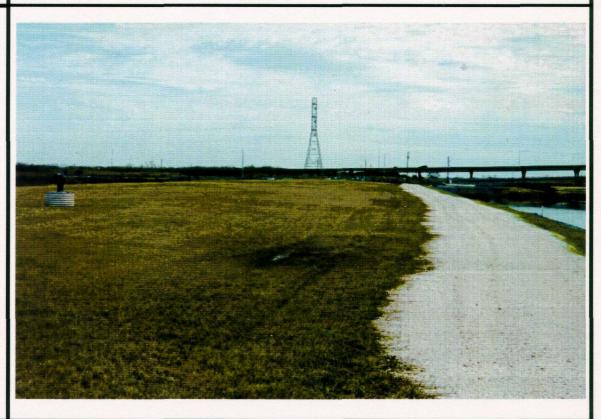
02/27/98

#### Direction:

East

#### **Comments:**

North Dike Cap and Access Road; Isolated Ponding (<2" Depth).



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

Date:

02/27/98

Direction:

West

Comments:

North Dike Cap along Ridge Line and Gas Vent.



#### Photographer:

Parsons Engineering Science, Inc.

Date:

02/27/98

Direction:

East

**Comments:** 

North Dike Cap and Access Road Turnaround.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons
Engineering
Science, Inc.

Date:

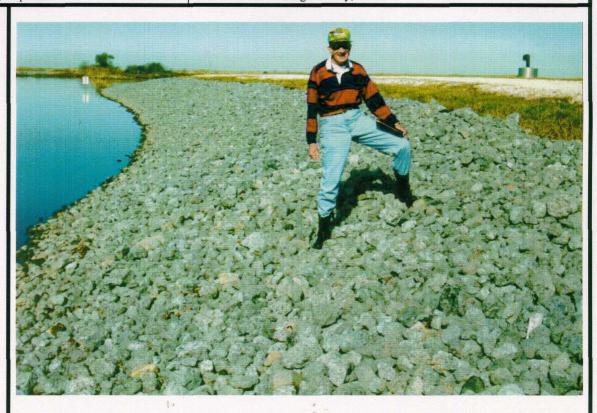
02/27/98

Direction:

West

#### Comments:

North Dike Slope along Pond A; Possible Minor Settlement Location.



#### Photographer:

Parsons
Engineering
Science, Inc.

Date:

02/27/98

Direction:

West

#### Comments:

North Dike Cap; Hay Bale Erosion Control at Repaired Location.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

South

#### Comments:

East Dike Cap and Access Road.



#### Photographer:

Parsons
Engineering
Science, Inc.

#### Date:

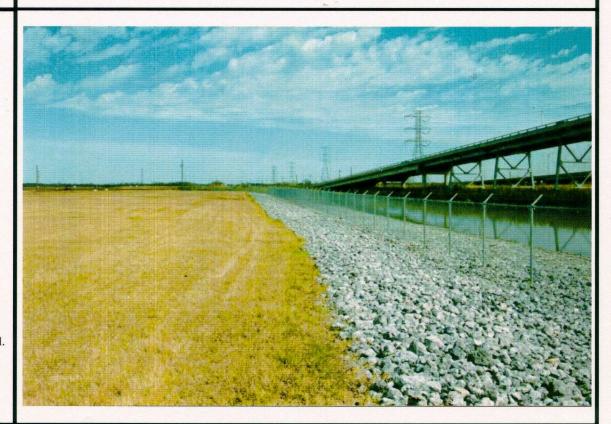
02/27/98

#### Direction:

North

#### Comments:

East Dike Cap, Slope, and Fence Along the East Drainage Channel.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons
Engineering
Science, Inc.

#### Date:

02/27/98

#### Direction:

Southwest

#### Comments:

East Dike Access Road, Fence, and Gate.



#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

North

#### Comments:

East Dike Cap Along Ridge Line and Gas Vent.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

Date:

02/27/98

Direction:

South

Comments:

East Dike Cap and Access Road; Isolated Ponding Area (<2" Depth).



#### Photographer:

Parsons Engineering Science, Inc.

Date:

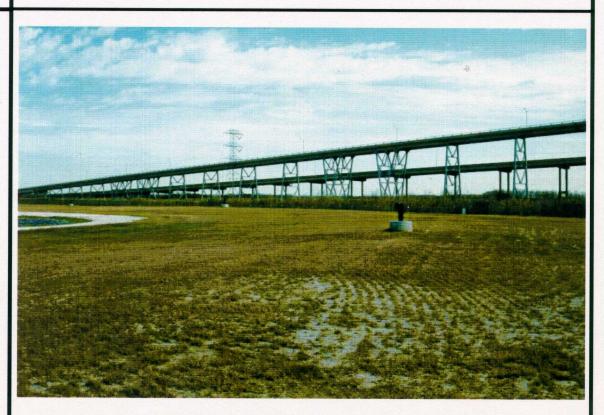
02/27/98

Direction:

Northeast

Comments:

East Dike Cap and Gas Vent at Southern End.



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

South

#### Comments:

East Dike Cap; Ponding Area (<2" Depth).



#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

Southeast

#### Comments:

East Dike Cap; Ponding Area (2" to 3" Depth).



Site Name: Bailey Superfund Site

Site Location: Orange County, Texas

#### Photographer:

Parsons Engineering Science, Inc.

#### Date:

02/27/98

#### Direction:

North

#### Comments:

East Dike Cap and Gas Vents Along Ridge Line.



# **APPENDIX A**

# QUARTERLY SITE INSPECTION CHECK LIST

125145

Inspection Date: FERRUARY  Inspection Time: 09:00 Ar  Name of Inspector: ERNIE SCA  Weather Conditions: CLEAR TE	Y IEOEOE	x/m	LARK WERPHY
Ground Inspections			
Condition of Vegetation:			
<b>3</b>	Grass He	eight	3 to 4"
	Color	Ü	BROWN TO GREEN
	Fuliness		ISOLATED THIN AREAS
	Areas of	Concern:	Yes No (If Yes Detail on Map)
Signs of Erosion:	Yes	No	(If yes detail location on map and note average depth and width)
Exposed Geosynthetics:	Yes	No	(If yes provide location on map and note if its the geocomposite drainage layer, 60 mil HDPE liner, or geosynthetic clay liner)
Signs of Differential Settlement:	Yes	No	(If yes, provide location on map noting estimated depth and width)
Ponding Greater than 2" in Depth:	(Yes)	No	(If yes, provide location on map noting depth)
Evidence of Prolonged Ponding	Yes	No	
Estimated date of last rain event:	HEAVY	RAW	THE 25th FEB.
	APPRO		RAIN. JAN & FEB. VERY WET MONTHS
Gas Vents:	• • -	BEEN	VERY WET MONTHS
Condition of Barrier:	GOOP		
Condition of Piping:	GOOD	<b>A</b> 1-	
Screens Intact:	(es)	No No	(If no to any, provide details on map)
Riser Pipe Plumb:	Yes	No 	

Condition of Dike Breaches and Drainage Pip	condition	on of Dik	e Breaches	and Drainage	Pipes
---	-----------	-----------	------------	--------------	-------

Verify that each allows free drainage:

Pond A culvert at South end of East Dike: Yes

No

Site Entrance Area (Non-capped Area):

No

Perimeter Dike Breach in Pond A:

Perimeter Dike Breach in North Dike:

No No

If the answer was No to any of the above, describe the obstruction:

N/A

#### **Fence and Sign Inspection**

**Chain Link Fencing** 

Signs of unauthorized entry:

Yes

**@** 

Fence Damage:

Yes Yes



Barb Wire Damage:

Yes



Gates & Locks in good condition:



(Yes)

No

**Overhang Extensions** 

Corrosion:

Signs of unauthorized entry:

Yes



Signs of damage:

Yes



Signs

Verified all signs:

Yes

Signs on all gates:

(Yes)

Provide location of any damage on the map. Describe below any damage to the fence or signs:

ONE SIGN WAS OBSERVED TO BE MISSING ON THE

FENCE ALONG THE EAST ONE AREA.

Site Access Bridge			
Are the following in good condition:			
Wood Decking	(Es)	No	
Hand Rails	(YES)	No	
Approaches	(Yes)	No	
Bridge Steel Structure	(es)	No	
If no, describe the observed condition:	•		
	/		
N/A			
Road Inspection		-	
Rutting	Yes	No	(If yes to any, provide location on map)
Potholes	Yes	<b>1</b>	
Erosion Channeling	Yes	<b>40</b>	
Accumulation of Silt	Yes	No	
Other General Site Observa	tions:		
. THE AREA ON THE	= Nb	KTH DI	ke where
THE SOIL HAD ERON	DED I	DOWN 7	O THE LINEK
HAD BEEN REPAIRE	D An	SO AP	EARED TO BE
IN GOOD CONDITION	WITT	Y THE	HAY BALES
PROVIDING EROSION	Pro	ECTION	I UNTIL THE
GRASS CAN FULLY			
· IT APPEARS THE	GRA	55 15	STILL DORMANT
BUT IS SHOWING	SIGNS	OF	GROWTH BERINWING.
. WINTER GRASS TH			
EROSION PATCHES	HAS -	TAKEN	GROWTH.
The second secon	<u> </u>		

Summary of Problem Areas Identified
. THIN GRASS WAS OBSERVED AT THE SOUTH END
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NORTH DIKE POND A SLOPE (OUT SIDE OF
THE CAP LIMITS).
· MISSING SIGN MOUNTED TO THE FENCE
LOCATED ON THE EAST DIKE ALONG THE
ORAINAGE CHANNEL.
· ONE AREA OF PONDING OF 2 TO 3" ON
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AREAS OF PONDING OF 2" OR LEGS ALONG
THE ACCESS ROADS OF BOTH THE EAST
AND NORTH DIKES.
· SOME SILT FENCE DEBRIS THAT NEEDS TO
BE CLEANED-UP AT THE NORTH END OF THE
EAST DIKE.
· FENCE EXTENSION / BARBWIRE NEEDS TO BE PRINCES
· FENCE EXTENSION BARBWIRE NEEDS TO BE PRINCED WHERE FENCE CROSSES DRAINAGE DITCHES IN
THE FORMER SOFE LAYONWAL AREA.

Inspector's Signature

2/27/98

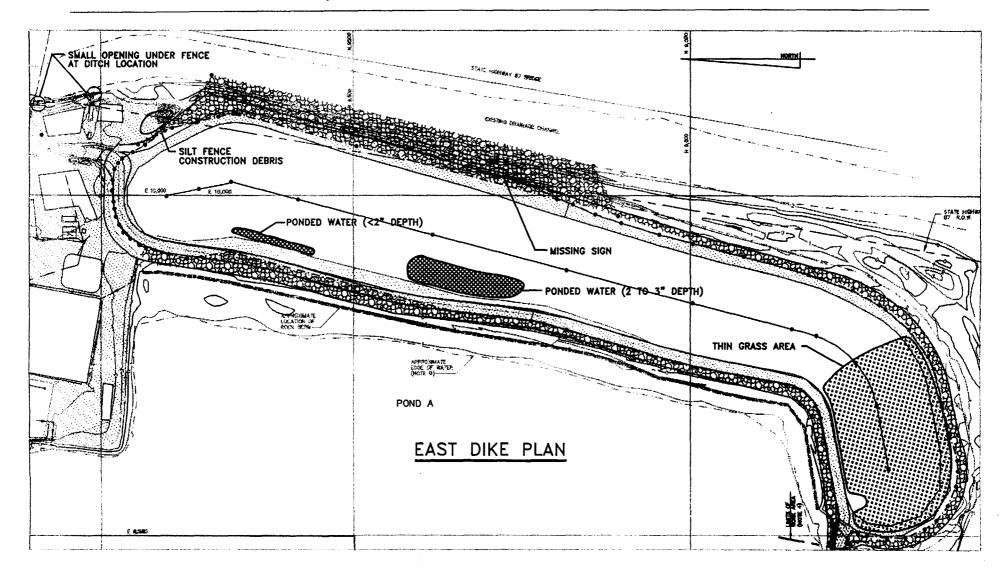
Date

# **APPENDIX B**

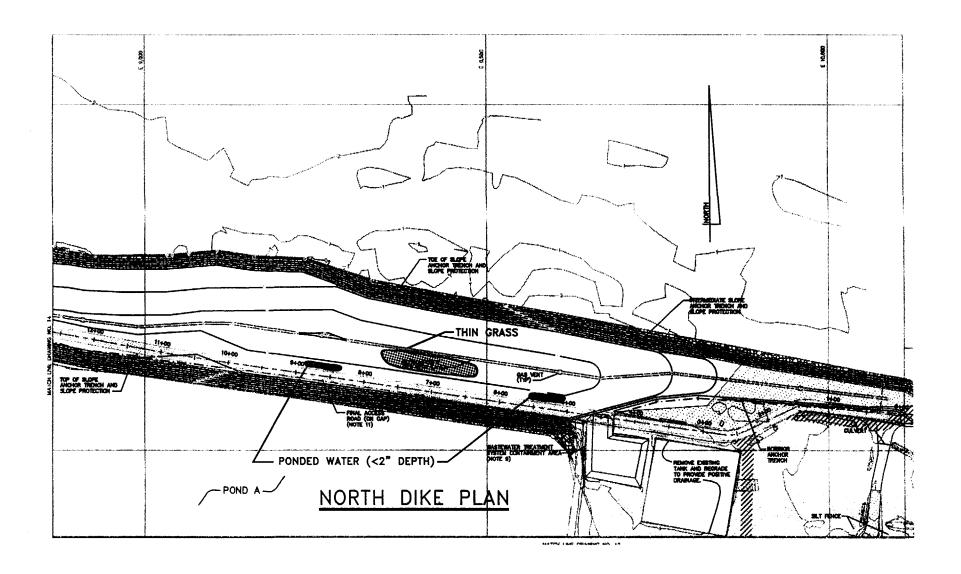
**SITE MAPS** 

125148

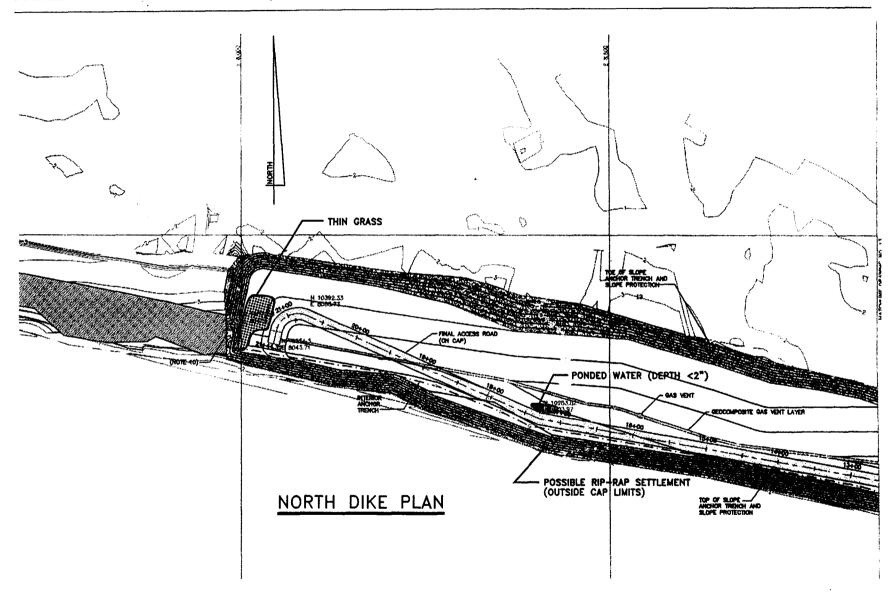
#### PARSONS ENGINEERING SCIENCE, INC.













# **APPENDIX C**

# **PHOTOGRAPHS**

# This Document Contained Material Which Was Not Filmed/Scanned

Title Photographs taken during Quarterly

Site inspection at Bailey Waxte Disposal

Superfund Site

Please Refer to the File in Superfund Records Center